# Technological Approaches To Solve Problems In Islamic Education

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### **Abstract**

Educational technology is an interesting field that facilitates the process of teaching and learning activities in an educational environment, particularly in teaching about Islam. Technology plays a crucial role as a tool that helps teachers in conveying materials to students effectively. However, Islamic education in the digital age is facing problems related to the efficiency and effectiveness of educational resources, which can be broken down into three aspects: students' lack of interest in learning, conventional learning methods, and lack of innovation in learning media.

This research aims to analyze the potential of technology in solving problems in Islamic education using various approaches. The research method used is a qualitative literature study approach. The results show that technology has great potential to increase students' interest in learning, make learning methods more interactive and engaging, and create learning innovations for students. The educational technology approach model in solving problems uses an isomorphic approach, a systematic approach, a synergetic approach, a comprehensive approach and an innovative approach.

Technology is a solution to the problems of Islamic education with the Internet as a learning medium, the use of E-Learning in learning, ICT-based PAI learning and PAI Learning Innovation. In conclusion, technology can be a solution to the problems of Islamic education in learning. The use of technology in Islamic education can be done in various forms of application to learning. The technology used includes the use of the internet as a basis for multimedia-based learning media, the application of e-learning, and the development of Islamic education learning applications

**Keywords:** Islamic Education, problems technology, learning media.

### A. INTRODUCTIONS

Education plays a critical role in the development of nations and states. However, the two main challenges faced in education are improving the quality of education and expanding learning opportunities. The use of educational technology, or any other technology for information, communication, and education, is believed to be one of the strategic ways to overcome these challenges. This is in line with the National Education Reform Commission's formulation, which was established by the Minister of Education and Culture in 1979.

In the future, education will belong to those who can utilize technology for teaching and instruction. The use of educational technology is necessary for effective teaching and learning activities. With a scientific, systematic, and rational approach, as required by educational technology, educational goals can be achieved effectively and efficiently. Individuals, institutions, educational institutions, and governments are making various efforts to take advantage of technological developments. It is time for the world of Islamic education to utilize this technology. However, the rapid development of technology in the era of globalization, which is used to increase the effectiveness and efficiency of education, also has an impact on the socio-cultural world of society, including Islamic religious education.

Islamic religious education plays an essential role in human life, and it cannot be separated from one another. If Islamic education is implemented optimally, progress will be realized in civilization. On the other hand, if Islamic education is not implemented optimally, it can lead to the destruction of civilization. Nowadays, Islamic education is facing the challenges of the era of globalization. Adequate strategies and solutions are required to tackle these problems so that these challenges do not hinder the progress of Islamic education.

Therefore, in the digital and globalization era, technology should be utilized as an approach tool to solve educational problems, especially in Islamic religious education. By presenting solutions that can be used to solve the problems of Islamic religious education in schools, madrasas, Islamic boarding schools, and universities, we can overcome the challenges faced in this field.

### B. METHODS

This study was conducted using the library research method, whereby all the data was obtained from literature that discusses the relationship between Islamic education and the era of globalization, as per the views of experts and educational figures. Based on this data, a comprehensive discussion can be summarized.

### C. RESULTS AND DISCUSSION

#### **Literature Review**

# 1. Educational Technology Theory and Practice

Educational technology in English terms Instructional Technology is a communication medium that is developing rapidly, and can be used in education. Another opinion says that educational technology is the development, application and assessment of systems, techniques and tools to improve and enhance the human learning process (S. Nasution, 2018: 1). Educational technology is defined as a systematic way of designing, implementing and evaluating the entire teaching and learning process, in relation to specific objectives and based on the principles of learning and communication that occur in humans, and utilizing various human and non-human sources with the aim of teaching more effective (Nana Sudjana, 2018: 68).

The definition of educational technology needs to be seen from various aspects, namely: theoretical aspects, field aspects and professional aspects. If viewed from a theoretical aspect, educational technology is a series of ideas and principles about how education and learning should be carried out using technology. Meanwhile, aspects of the field of development view educational technology as the application of theoretical ideas and principles to solve concrete problems in the field of education and learning. And from a professional aspect, educational technology is seen as a profession, a particular group of implementers who are organized, meet certain criteria, have certain tasks, and join to form a certain part of the field (AECT, 2017: 19-20).

The meaning of educational technology as a field of development includes at least three things, namely the growth and development of innovative learning systems, the use of communication and information technology, and learning technology for human resource development. The meaning of educational technology as a profession is developing towards increasing expertise, professional recognition and the development of professional organizations. Meanwhile, the meaning of educational technology as a field of study has developed with three approaches, namely: empirical approach, analytical approach, and theoretical approach (Miarso, 2015: 560-563).

In this aspect of the field, namely the existence of a technology-based learning system or the use of technology for learning can contribute to improving the quality of learning in Islamic religious education. In the study aspect, educational technology is interpreted as approaches that can provide several alternative problem-solving methods in learning. In general, the steps that need to be taken in this educational technology approach are: (S. Nasution, 2018: 9).

- a. Formulate clear goals, must be achieved, and can be seen as a problem;
- b. Presenting a hypothesis;
- c. Assess lesson results/hypothesis;
- d. Look for improvements, if the results do not meet the specified requirements or standards

Looking at these steps, it can be illustrated that technology in the sense of approach can be interpreted as the same as the steps in research methods because every learning starts on the basis of a problem or problem, and technology helps provide effectiveness in detecting and solving problems in the learning process.

Some of the meanings of educational technology above have gone through several stages or paradigms. Below, at a glance, we explain the history of the meaning of educational technology, which began around 70. Educational technology has always been associated with equipment, especially audiovisual equipment. This meaning is called the first paradigm. The second paradigm departs from the systems approach and communication theory in educational activities. The third paradigm departs from the instructional process management approach, where

elements have different functions but are integrated integrally. The fourth paradigm departs from the behavioral science approach, namely focusing attention on students so that they can learn effectively and efficiently. The new paradigm or fifth paradigm interprets the focus of educational technology as solving learning problems. So the definition of educational technology is theory and practice in designing, developing, utilizing, managing and assessing processes and resources for learning (Miarso, 2015: 544).

Technology has certain characteristics that are very relevant for educational purposes. The technological approach in education allows for: First, the dissemination of information widely, evenly, quickly, uniformly and integrated. Second, presenting the material logically, scientifically and systematically and being able to complement, support, clarify the concepts, principles or propositions of the subject matter. Third, become a teacher partner in realizing the teaching and learning process effectively, efficiently and productively according to the needs and demands of students. Fourth, using it as a learning resource can present material in a more interesting way (Sudarwan Danim, 2016: 34).

# 2. Understanding Educational Problems

Problema comes from the English word "problematic" which means problem or problem. Problem which can be interpreted as a problem or problem. The problem itself is an obstacle or problem that must be solved, in other words, a problem is a gap between reality and something that is expected well, in order to achieve maximum results. There is also in the Big Indonesian Dictionary the word Problematika which means it still creates problems that cannot be solved (Center for Languages of the Ministry of National Education, 2015: 864).

Education is an effort to foster and develop human personality, both spiritually and physically. There are also some experts who interpret education as a process of changing the attitudes and behavior of a person or group of people in maturing through teaching and training. With education we can be more mature because education has a very positive impact on us, and also education can eradicate

illiteracy and will provide skills, mental abilities, and so on. As stated in Law No. 20 of 2003, education is a basic and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble character and skills, that is needed by himself, society and the State (Haryanto, 2018: 56) In conclusion, problems are obstacles or problems that still cannot be solved so that achieving a goal is hampered and not optimal. Educational Problems is a collection of problems or problems that can hinder the goals of education in fostering and developing human personality, both spiritually and physically.

## 3. Forms of Problems in Islamic Education

The problems of Islamic education boil down to the management and efficiency of educational resources. Educational resources are everything that is used in the implementation of education which includes educational staff, community, funds, facilities and infrastructure (UURI No. 20 of 2003). However, of all the existing educational resources, there are three problems that are often encountered in the education and learning process, namely: (Muhaimin, 2016: 38)

## 1) Lack of Student Interest in Learning

Students' interest in learning greatly determines their success in the learning process. There are several factors that influence interest in learning, including the following:

### A. Internal factors

Factors within students are factors that influence students' interest in learning which originate from the students themselves. Factors within the student consist of: a). Physical Aspects: Physical aspects include the physical condition or physical health of individual students. Excellent physical condition really supports learning success and can influence interest in learning. b). Psychological Aspects, According to Sardiman, psychological factors include attention, observation, response, fantasy, memory, thinking, talent and motives (Sardiman, 2019:44).

#### B. External Factors

Factors from outside the student include: a). Family The family has a big role in creating interest in learning for children. As we know, the family is the first educational institution for children. The way parents teach can influence children's interest in learning. Parents must always be ready when their children need help, especially with subject matter that is difficult for their children to understand. This aims to make children feel comfortable and find it easy to concentrate on the material at hand. b). School Factors within the school include teaching methods, curriculum, learning facilities and infrastructure, learning resources, learning media, student relationships with their friends, teachers and school staff as well as various co-curricular activities. The knowledge and experience provided through school must be taught well. the process of educators carrying out education while still paying attention to the condition of their students. In this way, a situation that is fun and not boring is created for children in the learning process. 3. Community environment The community environment includes relationships with friends, activities in the community, and the living environment. Academic activities would be better if balanced with activities outside of school. There are many activities in the community that can foster children's interest in learning.

According to JT. Loekmono, the factors that cause students' lack or loss of interest in learning are as follows: (Loekmono, 2018: 67)

- A. Physical abnormalities in the eyes, ears, glands, which make it very difficult for children to follow lessons or carry out assignments in class.
- B. Lessons in class do not stimulate children. The child's ability level is far above what is required in following lessons and as a result the child feels bored. class.
- C. There are mental problems or difficulties that cause him to retreat or run away from reality. In this case the child will show the same symptoms everywhere, namely not showing interest or paying attention to anything outside the classroom.
- D. Children's main attention is devoted to activities outside the classroom, such as sports, activities in the classroom, work that requires mechanical skills, or doing activities that can earn money.

- ISSN: 2963-9816
- E. His attitude of seeming to have no attention or interest is actually just an act of pretending. The real situation is that he wants to give that impression, so that people can accept the fact that he is not competing/or unable to compete with other people, who he sees as much more capable than himself.
- F. There is a personal conflict with the teacher, or with parents. By showing this attitude he actually wanted to show an attitude against them; so this attitude is a type of weapon to fight.

# 2). Conventional Learning Methods

The conventional learning method that plays the most active role in the learning process is the teacher, while students are only required to listen and follow what the teacher says. Conventional learning methods according to several experts. According to Djamarah, conventional learning methods are traditional learning methods or also called lecture methods, because this method has long been used as a tool for oral communication between teachers and students in the teaching and learning process. In history learning, the conventional method is characterized by lectures accompanied by explanations and the distribution of tasks and exercises. According to Syaiful, conventional (traditional) learning can be called a learning model because it contains syntax, social systems, reaction principles and support systems. The conventional learning model requires students to memorize the material provided by the teacher and not to relate the material to reality. (Djamarah, Syaful, 2010: 78)

According to Paulo Freire, this conventional learning pattern leads to a type of education which is termed banking, where students are filled and filled with a variety of subject matter. Students only accept everything that has been and will be prepared by educators without other critical activities.

According to the view of educational psychology, the conventional learning model is a model or method used by teachers or educators in everyday learning using general and ordinary models, without even adjusting the appropriate method based on the nature and characteristics of the learning material or subject area being studied.

Conventional methods that are often used include lectures and question and answer lecture methods, where learning activities are centered on the teacher as the provider of information (learning material). The question and answer method is a way of presenting lessons that must be answered, especially from the teacher to the students, but can also be from students to the teacher. As a result, the weakness that often occurs when using conventional learning methods is that students often feel sleepy during the learning process, talk to themselves and do other activities during the learning process.

## 3). Lack of Innovation Instructional Media

The learning process will not run optimally without learning media. Media are various types of components in the student environment that can stimulate students to learn. Heinich and friends put forward the term medium as an intermediary who delivers information between the source and the recipient. So television, film, photographs, radio, audio recordings, projected images, printed materials, and the like are communication media. If the media carries information that has instructional purposes or contains teaching purposes, then the media is called teaching media.

Based on this explanation, learning media is really needed by teachers to help the process of conveying material in a learning process. Students tend to be more motivated and easier to understand if the learning process uses animation media and students will remember it more easily and can maximize the learning outcomes achieved. The use of media in the teaching and learning process has the following practical values: (Asnawir, 2017: 13-14)

- a. Media can overcome various limited experiences that pupils or students have. Each individual's experience varies because of family and community life which determines the type of experience they have.
- b. Media allows direct interaction between students and the environment. Physical and social symptoms can be communicated with.
- c. Media produces uniformity of observation. Observations made by students can be jointly directed at things that are considered important according to the goals they want to achieve.

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- d. Media can instill big, concrete and realistic basic concepts.
- e. Media can generate new desires and interests.
- f. Media can generate motivation and stimulate students to learn.
- g. Media can provide an integral experience from the concrete to the abstract In learning and psychological practices, learning media really helps children's psychological development in terms of learning. It is said this because psychologically, teaching aids in the form of learning media really make it easier for students to learn because media can make abstract things more concrete (real). This is in line with what Rusyan said, namely that in principle media is used in the learning process with the aim of creating a more effective and efficient way of communicating.

Regarding the effectiveness of media use in the learning process, the Ministry of Education and Culture emphasizes that the use of media in the learning process can arouse students' interest and motivation to learn, reduce or avoid verbalism, generate orderly, systematic reasoning, and to foster understanding and develop values in students (Department of Education and Culture, 2010: 88). The advantage of using learning media is very important because it can save time. This means that learning using media can simplify problems, especially in conveying things that are new and unfamiliar to students. From several things described above, it can be concluded that learning media is very important for increasing elementary school students' interest in learning. Learning using media can also provide meaningful experiences for students because by using media students can directly witness things that are happening around them.

# 4. Educational Technology Approach Model

In essence, educational technology is a discipline that is concerned with solving learning problems based on a series of principles and using various approaches. Learning problems can be found everywhere and with whom. The way to overcome learning problems is through an approach which is the epistemological basis of educational technology: (Japar, 2019: 52)

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- 1) Isomorphic approach, namely combining various studies or isomorphic approach, namely combining various studies or scientific fields (psychology, communication, management, etc.) into one whole scientific field.
- 2) Systematic approach, namely in a sequential and directed way. Systematic approach, namely in a sequential and directed way in trying to solve problems.
- 3) Approach, which guarantees added value from the Synergistic Approach, namely which guarantees added value from the whole activity compared to if the activity was a whole activity compared to if the activities were carried out individually.
- 4) Comprehensive, namely a thorough and complete assessment.
- Original and has added value. Contains updates so that learning is original and has added value. Contains updates so that learning can be accelerated and enjoyable. The emergence of educational technology was born from problems in education. Educational problems that arise today include equal distribution of opportunities to obtain education, relevance and efficiency of education and improving the quality of education. A serious problem that is still felt by education from basic education to higher education is the quality problem, of course this can be solved through an educational technology approach. There are three basic principles that can be used as a reference in the development and use of learning technology, namely: (Syafriafdi, 2020: 58)
- 1) A systems approach, namely a sequential and directed way of trying to solve problems, means looking at everything as a whole with all components that are attached to each other.
- 2) Student-oriented (learner centered), that education, learning and training efforts should focus their attention on students.
- 3) Utilizing learning resources as maximally and as varied as possible (utilizing learning resources), students learn because they interact with various learning resources maximally and variedly. Thus, problem solving efforts in the educational technology approach are by using learning resources. This is indicated

by changing the term from educational technology to learning technology. In the definition of learning technology, it is stated that educational technology is theory and practice in the design, development, utilization, management and evaluation of resources and processes for learning.

It can be concluded that educational technology is the application of scientific knowledge in learning so that learning objectives can be achieved effectively and efficiently, which is not only limited to tools and goods or hardware but also software and brainware.

# 5. Educational Technology as a Solution to Islamic Education Problems

### 1) Internet as a Learning Media

The internet is a medium for sharing information and interacting anytime and anywhere. According to Turban, the internet is a large computer network in the world which is actually a network of networks. O'Brien believes that the internet is a computer network that is growing rapidly from millions of schools connected to millions of computers and has many users (Munir, 2019: 147). Initially, the internet was born for the needs of the United States military. In early 1969 the Avanced Research Project Agency (ARPA) of the United States Department of Defense created a network experiment called ARPAnet to support military research needs. However, in subsequent developments this network was used for high altitude research purposes, starting with the University of California, Stanford Research Institute and the University of Utah (Arief, 2017: 307).

A number of studies have been carried out, showing that the internet can indeed be used as a learning medium, such as a study conducted by the Center for Applied Special Technology (CAST) in 1996 on around 500 students in grades five and six of elementary schools. The 500 students were put into two groups, namely the experimental group whose learning activities were equipped with internet access and the control group. After two months it showed that the

experimental group got a higher score based on the final test results (Arief, 2017: 309).

The SMART school management believes that the use of ICT, especially the internet, can encourage students to be more active in learning, allowing for various variations that can be carried out in the learning and teaching process, acquiring multiple skills and achieving efficiency. The Sunday Star daily said SMART schools in Malaysia are examples of schools of the future. In Singapore there is an Excellent School, in Thailand there is a Progressive School, in the Philippines it is called a Pilot School (Arief, 2017: 200).

Utilization of the internet for education and learning can be done in three forms, namely: (Arief, 2017: 309-311)

- I.Web Course, is the use of the internet for learning purposes, where all study materials, discussions, consultations, assignments, exercises and exams are completely delivered via the internet. This form does not require face-to-face activities either for learning purposes or evaluations and exams, because all teaching and learning processes are carried out entirely through the use of internet facilities such as e-mail, chat rooms, bulletin boards and online conferences.
- II.Web Centric Course, where some study materials, discussions, consultations, assignments and exercises are delivered via the internet, while exams and some consultations, discussions and exercises are carried out face to face.
- III. Web Enhance Course, namely the use of the internet for education, to support improving the quality of teaching and learning activities in the classroom. This form is also known as a web lite course, because the main learning activity is face-to-face in class.

These two forms of using the internet for learning are very possible for non-formal PAI learning, namely web courses and web centric courses. Meanwhile, formal PAI learning at schools or madrasas can utilize the form of web enhancing courses. Now it remains to be seen how these forms of internet use can be mastered by PAI teachers as operators or media users together with students.

The benefits of using the internet for education and learning purposes are as follows: *First*, teachers and students can communicate regularly and have

discussions via the internet. *Second*, teachers and students can use teaching materials or study instructions in a structured and scheduled manner. *Third*, students can review teaching materials at any time, and can add information related to teaching materials. *Fourth*, the role of students becomes more active. *Fifth*, it is relatively more efficient. (Arief, 2017: 201)

One of the benefits of the internet for learning above is that communication between teachers and students can occur regularly. This is possible in the form of real time such as in a chatroom, direct interaction with real audio/real video, and online meetings. And also in no real time form, such as with mailing lists, discussion groups, newsgroups and bulletin boards. Forms of material, exams, quizzes and other educational methods can also be implemented on the web. (Uno, 2010: 81) Apart from that, an important benefit of using technology/internet in learning is about access. With the internet, accessing millions of sources of information is very easy. The internet is also a cheap, easy and global publication medium. (Anshori, 2010: 84)

Educational institutions use this media to increase their competitiveness, improve services to learners or stakeholders and increase the effectiveness and efficiency of real learning activities. Fast and easy internet access, via the internet, opens up opportunities for increased learning, known as online learning or e-learning. (Munir, 2019: 147)

# 2) Utilization of E-Learning in Learning

The term e-learning consists of the letter e which stands for electronic and the word learning means learning. Thus e learning can be interpreted as learning by utilizing the help of electronic devices, especially computer devices. The term e-learning can also be defined as a form of information technology applied in the field of education in the form of cyberspace. However, the term e-learning is more accurately intended as an effort to transform the learning process in schools/madrasahs or universities into a digital form bridged by internet technology. (Munir, 2019: 169)

Studies conducted by America strongly support the development of e-learning, namely stating that computer based learning is very effective, enabling 30% better

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ISSN: 2963-9816

education, 40% shorter time, and 30% cheaper costs. The World Bank (World Bank) in 1997 announced the Global Distance Learning Network (GDLN) program which has partners in 80 countries throughout the world. Through GDLN, the World Bank can provide e-learning to 5 times more students (from 30 to 150 students) at 31% cheaper costs. (Hamzah, 2017: 40)

The use of e-learning in the learning process has often been carried out, because this e-learning system has advantages including: increasing learning interactions (enhance interactivity), making learning interactions easier from anywhere and at any time (time and place flexibility), having a wider reach (potential to reach a global audience), and makes it easier to refine and store learning materials (easy updating of content as well as archivable capabilities). (Munir, 2017: 174-176) This e-learning system also has principles, so that learning can provide benefits for both teachers and students. These principles are: first, e-learning as a tool to help the learning process so that it can solve problems, produce creativity, make the learning process easier, more focused and meaningful; secondly, e-learning as an alternative in the education system has a high-tech-high-touch principle, namely the process relies more on advanced technology and the more important aspect is the high touch, namely the teacher or students; third, adapt e-learning to the readiness of teachers, students, facilities and learning system culture. (Munir,

In reality, the application that is now widely used in the learning process is the internet with various facilities and forms of application such as e-learning. This becomes even more complicated when it is applied to the process of learning about the Islamic religion by some teachers because they are of the religious education paradigm that the content must be delivered through lecture methods and directly face to face because the content is dogmatic. Because the content on the internet still needs to be questioned about the content and veracity of the source.

According to Fryer, there are two approaches that teachers can take in utilizing or implementing e-learning, namely: (Bambang, 2018: 151-152)

- 1) Topic Approach (Theme-Centered Approach) The steps taken in this approach are: Determine the topic. Determine the learning objectives to be achieved. And determine learning activities by utilizing relevant information technology to achieve learning goals.
- 2) Software Approach (Software-Centered Approach) In this approach the first step begins with identifying information technology. Then the teacher plans relevant learning strategies for a particular learning topic.

# 3) ICT-Based PAI Learning

The problems with Islamic religious education so far include three things: first, the wrong definition of religion. Second, the paradigm used in religious learning. Third, the purpose of religious learning. Religion is only interpreted as rituals and readings, even though in depth religion can be interpreted as the whole of human behavior in life. This behavior forms human integrity with noble character based on faith in God and personal responsibility in the future. (Dudung, 2017: 6)

The paradigm used in studying religion in schools/madrasahs is not yet comprehensive, because it still has a substantive paradigm, namely studying religion only to the extent of studying texts without combining it with moral objectives that provide eternal ethical guidance. Therefore, a paradigm like this needs to be followed by an inclusive paradigm which has an open view towards everything because no human being is perfect, and also followed by a pluralistic paradigm which holds the view that diversity is something that is inevitable.

The third problem is the wrong aim of religious learning, therefore the essence of religious learning in schools/madrasahs is to cleanse, remind and inspire, as well as activate the nature of every human being, so that nature is able to influence and direct a person's thought patterns and actions/actions. Apart from that, the research results also show that the application of Islamic religious learning has a very high dependency. It is influenced by facilities, school conditions, families, students, and how teachers perceive the curriculum.

Based on these problems, innovation in Islamic religious education learning is very necessary. One of them is ICT-based learning as a new alternative in the PAI learning process so that problems can be solved and the desired goals can be realized. However, this form of application of ICT-based Islamic religious education will be studied and designed according to the needs of students. ICT-based PAI learning here means an Islamic learning process that tries to solve educational problems by utilizing all available resources as effectively as possible. However, more emphasis is placed on utilizing ICT, especially the internet, as a learning medium for Islamic religious education in the form of e-learning.

As stated by Tajul Ariffin Noordin in (Abdul Majid, 2015: 167) that the use of advanced technology such as computers is very important and can influence the development of PAI in five stages. *First*, the use of computers in learning can act as a tool to enable PAI to expand its scientific paradigm; *secondly*, the use of advanced technology can be used to realize integration between PAI and science education; *thirdly*, how we can use and exploit positively all forms of existing technology to make PAI the basis for teaching educational sciences or the basis of the sciences. *fourth*, to create a worldwide PAI series. The ease of technology can be used to frame and develop a common PAI paradigm and curriculum for Islamic countries, *fifthly* to foster the concept of monotheism and science. This means that with technology we can explain that science is actually unitary. This fifth stage completes our efforts to foster an advanced Islamic civilization.

The five influences of technology on the development of PAI learning can be proven and the positive results can be felt if information technology in the current era of globalization is truly utilized and utilized by education stakeholders, especially PAI teachers.

### 4) PAI Learning Innovation

Innovation is a new change towards improvement or difference from what existed before, carried out deliberately and planned. In the context of learning technology, innovation refers to the use of advanced technology, both software and hardware in the learning process. The main aim of this new technology application is to improve the quality, effectiveness and efficiency of learning. Methods and strategies are also innovations in learning. (Bambang, 2018: 295)

Innovation in terms of Al-Qur'an Hadith messages conveyed in PAI learning has progressed. This is proven by the large number of Islamic software created by

experts that can be used to support learning media. Such as power point, flash, digital Al-Qur'an, digital Hadith, e-books, games and so on. Thus, the use of ICT can have a positive impact on PAI learning. It can make learning easier, as well as provide learning that is not boring by relying on just one method. PAI teachers are also not seen as outdated, but can pioneer ICT that is moral and dignified.

Innovation in learning Al-Qur'an Hadith in schools, for example, can be done by utilizing information technology in learning. For example: utilizing internet services in schools/madrasahs to support students to increase their knowledge regarding the subject of Al-Qur'an Hadith, while continuing to follow the Web Enhance Course learning form which uses the internet as a support for teaching and learning activities in the classroom alone.

Innovation can also be carried out with two different approaches, starting with a topic approach first or starting with a technology approach. In learning Al-Qur'an Hadith, for example, it begins by determining the topic or material that students will study, for example recitation material with the title "The law of nun sukun and tanwin", then the teacher looks for or utilizes relevant technology in the form of software or applications that contain this material. Now you can download various applications, including games/games about PAI materials.

The following are the steps for innovation in ICT-based learning of the Qur'an Hadith (using web blogs and media games in learning):

- 1) Teaching Al-Qur'an Hadith material about the science of recitation by utilizing web blogs on the internet which explain the laws of nun death and tanwin;
- 2) Provide each student with the opportunity to display their web blog and explain the material they have compiled according to the syllabus in front of other students;
- 3) Provide opportunities for other students to ask questions by utilizing the comments facility on the web blog that has been displayed or ask questions directly;

- ISSN: 2963-9816
- 4) The teacher gives students the opportunity to download games about the science of tajwid on Playstore, then the teacher appoints students to try the games by answering the questions in the games;
- 5) The teacher provides a detailed explanation of the material, completes the answers using web blog media, and assesses the results of students' answers in games media.

### D. CONCLUSION

Educational technology can be defined as theory and practice in designing, developing, utilizing, managing and assessing processes and resources for learning. The internet is a relevant media if used to support the quality of Islamic religious education. Because it can provide convenience and speed in conveying information so that the PAI learning process can run effectively and efficiently. The isomorphic, synergistic, systematic, comprehensive and innovative educational technology approach model has the potential to solve PAI problems. Solutions to resolve PAI problems, lack of student interest in learning, conventional learning methods and lack of innovation in PAI learning media by using the internet as a foundation for multimedia-based learning media can provide several facilities and services/applications such as: Website, Blog, Email, E-learning, and development of Islamic education applications to be used in the PAI learning process in schools and madrasas. PAI learning based on information and communication technology (ICT) can be a solution for PAI teachers who have experienced difficulties and stagnation in the learning process, especially aspects of learning methods.

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